

In the claims:

Please amend the claims as follows:

1. (Currently Amended) A heat transport system ~~for transporting heat energy from one or more heat sources to one or more heat sinks, the system comprising:~~

a condenser bank comprising one or more condensers ~~disposed in thermal communication with corresponding ones of the one or more heat sinks;~~

AS
~~one or more four port evaporators, each of the one or more four port evaporators being disposed in thermal communication with corresponding ones of the one or more heat sources a primary evaporator comprising a primary liquid port, a secondary fluid port, and a primary vapor port;~~

a liquid return line ~~connecting~~ coupled to the primary liquid port and connecting each of the one or more four port evaporators the primary evaporator to the condenser bank;

a secondary fluid line coupled to the secondary fluid port of the primary evaporator;

a fluid reservoir ~~having a liquid portion and a vapor portion, the liquid portion being coupled to be in fluid communication with the secondary liquid port of each of the one or more four port evaporators, and the vapor portion being coupled to be in fluid communication with the secondary vapor port of each of the one or more four port evaporators~~ fluid line;

an auxiliary evaporator disposed adjacent the fluid reservoir, the auxiliary evaporator comprising:

a ~~vapor output port, and~~

a fluid port in fluid communication with the fluid reservoir, ~~with the auxiliary evaporator being disposed in thermal communication with a corresponding one of the one or more heat sources; and~~

a vapor line connecting the condenser bank to the vapor output port of the auxiliary evaporator and to the primary vapor port of the primary evaporator ~~ports of each of the one or more four port evaporators;~~

wherein each of the one or more four port evaporators comprises:

a primary liquid port ~~coupled in fluid communication with the liquid return line;~~

a secondary liquid port ~~coupled in fluid communication with the liquid portion of the fluid reservoir;~~

~~a primary vapor port coupled in fluid communication with the vapor line, and
a secondary vapor port coupled in fluid communication with the vapor portion of
the fluid reservoir.~~

2. (Currently Amended) The heat transport system of claim 1, further comprising: a back pressure regulator disposed in the vapor line to prevent migration of ~~liquid into vapor spaces of the system~~ vapor into the condenser bank.

3. (Currently Amended) The heat transport system of claim 1, further comprising: ~~one or more a capillary flow regulators~~ regulator connected to a liquid output line of a ~~corresponding one of the one or more condensers~~ condenser of the condenser bank and being ~~disposed between the liquid return line and its respective one of the one or more condensers.~~

4. (Currently Amended) A ~~The~~ heat transport system for transporting heat energy from ~~one or more heat sources to one or more heat sinks, the system comprising:~~

~~a condenser bank comprising one or more condensers disposed in thermal
communication with corresponding ones of the one or more heat sinks;~~

~~one or more four port evaporators, each of the one or more four port evaporators
comprising:~~

~~a of claim 1, wherein the primary wick having~~ includes a core,
~~a the primary liquid port feeding~~ feeds into the core ~~via~~ through a liquid bayonet
return,
~~a secondary liquid port,~~
~~a the secondary wick providing~~ provides a flow path between the secondary liquid
port and the core,
~~a the primary vapor port is~~ is coupled to receive vapor exiting the primary wick, and
~~a the secondary vapor port is~~ is coupled to the core;
~~with each of the one or more four port evaporators being disposed in thermal
communication with corresponding ones of the one or more heat sources;~~

~~a fluid reservoir having a liquid portion and a vapor portion, the liquid portion being coupled to be in fluid communication with the secondary liquid port of each of the one or more four port evaporators, and the vapor portion being coupled to be in fluid communication with the secondary vapor port of each of the one or more four port evaporators;~~

~~an auxiliary evaporator disposed adjacent the fluid reservoir, the auxiliary evaporator comprising:~~

~~a vapor output port, and~~

~~a fluid port in fluid communication with the fluid reservoir,~~

~~with the auxiliary evaporator being disposed in thermal communication with a corresponding one of the one or more heat sources;~~

~~a liquid return line connecting the primary liquid ports of each of the one or more four port evaporators to the condenser bank; and~~

~~a vapor line connecting the condenser bank to the vapor output port of the auxiliary evaporator and to the primary vapor ports of each of the one or more four port evaporators.~~

5. (Cancelled)

6. (Cancelled)

7. (Currently Amended) ~~A four port~~ An evaporator for use in a heat transport system, the ~~four port~~ evaporator comprising:

~~a primary wick having~~ defining a core;

~~a vapor channel configured to receive vapor exiting the primary wick;~~

~~a liquid channel within the core that is configured to receive liquid from a source external to the evaporator, at least a portion of the liquid channel is void of a wick;~~

~~a primary liquid port feeding into the core via a liquid bayonet return;~~

~~a secondary liquid port;~~

~~a secondary wick providing a flow path between the secondary liquid port and~~ within the liquid channel of the core;

~~a primary vapor port coupled to receive vapor exiting the primary wick; and~~

~~a secondary vapor port coupled to the core.~~

8. (New) The evaporator of claim 7 wherein the secondary wick is configured to separate liquid and vapor within the core.

9. (New) The heat transport system of claim 1 wherein the secondary fluid port is not in fluid communication with the primary liquid port.

10. (New) The heat transport system of claim 1 further comprising:
a second primary evaporator, and
a second secondary fluid line coupled to the secondary fluid port of the second primary evaporator,

wherein the liquid return line is coupled to the primary liquid port of the second primary evaporator to connect the second primary evaporator to the condenser bank and the vapor line connects the condenser bank to the vapor output port of the auxiliary evaporator and to the primary vapor port of the second primary evaporator.

11. (New) The heat transport system of claim 10 wherein the second primary evaporator is connected in parallel with the primary evaporator relative to the condenser bank.

12. (New) A heat transport system comprising:
a primary loop including:
a primary evaporator including primary wick defining a core and a vapor channel,
and
a condenser coupled with the primary evaporator by a liquid line in fluid communication with the core and a vapor line in fluid communication with the vapor channel; and
a secondary loop configured to purge at least one of vapor and non-condensable gas bubbles from the core of the primary evaporator, the secondary loop including:
a secondary fluid line in fluid communication with the primary evaporator,

a secondary evaporator coupled with the condenser through the vapor line, and
a reservoir in fluid communication with the secondary evaporator and coupled to
the primary evaporator by the secondary fluid line.

13. (New) The heat transport system of claim 12 wherein the reservoir is cold biased.

14. (New) The heat transport system of claim 12 wherein primary evaporator
includes a bayonet that couples fluid from the fluid line to the core.

15. (New) The heat transport system of claim 12 wherein the primary evaporator
includes a secondary wick within the core that separates at least one of vapor and non-
condensable gas bubbles from liquid in the core.

16. (New) The heat transport system of claim 15 wherein the secondary fluid line
provides a flow path for at least one of vapor and non-condensable gas bubbles from the core of
the primary evaporator to the reservoir.

17. (New) The heat transport system of claim 15 wherein the secondary wick is
configured to permit adjustment of capillary pumping within the core of the primary evaporator
based on heat conducted across the secondary wick.

18. (New) The heat transport system of claim 12 wherein the secondary fluid line is
segregated from the liquid line.

19. (New) The heat transport system of claim 12 wherein the primary evaporator
includes:

a primary liquid port in fluid communication with the liquid line,
a primary vapor port in fluid communication with the vapor line, and
a fluid port in fluid communication with the secondary fluid line.

20. (New) The heat transport system of claim 19 wherein the primary evaporator includes a secondary liquid port in fluid communication with the reservoir.

21. (New) The heat transport system of claim 19 wherein the fluid port is a secondary vapor port.

22. (New) The heat transport system of claim 12 wherein the reservoir is coupled to the primary evaporator by a secondary liquid line.

23. (New) The heat transport system of claim 12 wherein the primary loop includes a back pressure regulator in the vapor line.

24. (New) The heat transport system of claim 23 wherein the back pressure regulator includes a wick structure coupled to the condenser.

25. (New) The heat transport system of claim 23 wherein the back pressure regulator is configured to prevent vapor from flowing into the condenser until a pressure head is developed in the vapor line that exceeds a capillary back pressure in the wick structure.

26. (New) The heat transport system of claim 12 further comprising a second primary loop including:

a primary evaporator including a primary wick defining a core and a vapor channel,
a condenser coupled with the primary evaporator by a second liquid line in fluid communication with the core and a second vapor line in fluid communication with the vapor channel, the second liquid line at least partially overlapping with the liquid line and the second vapor line at least partially overlapping with the vapor line.

27. (New) The heat transport system of claim 26 further comprising a back pressure regulator in the portion of the vapor line that overlaps with the second vapor line, the back pressure regulator configured to load share heat applied to the primary evaporators.

28. (New) The heat transport system of claim 26 further comprising a second secondary loop configured to purge at least one of vapor and non-condensable gas bubbles from the core of the primary evaporator of the second primary loop, the second secondary loop including a second secondary fluid line coupling the primary evaporator of the second secondary loop with the reservoir.